

REMARKS

Claim 1 has been amended above to broaden the scope of the claim for an optical input section or an optical output section. This is described in the application, so no new matter has been added.

Claims 1-2, 7-8 and 10 were rejected under 35 U.S.C. §102(b) as being anticipated by Lebby et al. (US 5,367,593). Claims 1-5 and 7-10 were rejected under 35 U.S.C. §102(b) as being anticipated by Galloway et al. (US 5,359,686). Claims 1-5 and 7-10 were rejected under 35 U.S.C. §102(b) as being anticipated by Jiang et al. (US 5,636,298). Claims 1-8 and 10 were rejected under 35 U.S.C. §102(b) as being anticipated by Chun et al. (US 5,416,870). Claims 1-8 and 10 were rejected under 35 U.S.C. §102(b) as being anticipated by Knapp et al. (US 5,761,364). The examiner is requested to reconsider these rejections.

Lebby et al. discloses an electro-optical connector comprising a base having a well capable to accommodate an IC chip and a plurality of grooves extending from the well towards an edge of the base. The grooves are filled with a curable plastic material having an appropriate index of refraction to form optical waveguides. Lebby et al. fails to disclose an optical module having an optical end section comprising a flared cone and an end lens. Claim 1, on the other hand, claims that the optical fiber section comprises at least one flared cone, and that the optical section comprises an end lens. These features are not disclosed or suggested in Lebby et al. Therefore, claim 1 is patentable and should be allowed.

Galloway et al. regards an electro-optical connector comprising a base with a plurality of molded optical waveguides. The connector further includes a keyway, formed in one edge of the base, adapted to receive a mating optical keyway comprising a plurality of optical fibers. It is further taught that the waveguides may be tapered slightly adjacent their input/output section. However Galloway et al. does not disclose or suggest an electro-optical module having optical waveguides whose input/output end section is provided with an end lens. The features of claim 1 are not disclosed or suggested in Galloway et al. Therefore, claim 1 is patentable and should be allowed.

Jiang et al. describes an optical module having a first side provided with a plurality of input optical ports and an opposite second side having an output optical port. The module comprises a plurality of stacked waveguides provided with a main portion and bifurcated separate arms. Jiang et al. does not disclose or suggest an optical interconnection module having optical end section with an enlarged flared cone and terminated with an end lens. The features of claim 1 are not disclosed or suggested in Jiang et al. Therefore, claim 1 is patentable and should be allowed.

Chun et al. discloses in Fig. 3 an optoelectronic coupling device comprising two cladding regions, sandwiching a waveguide portion. Conductive traces are formed on surface the cladding and are connected to a photonic device whose purpose is to convert optical signals into electrical signals or vice-versa. The optical waveguide portion is cleaved at a precise angle so as to provide a surface. The surface

typically is either coated with a reflective material or a reflective optical element. Chun et al. does not disclose or suggest an optical interconnection module having optical end section with an enlarged flared cone and terminated with an end lens. The features of claim 1 are not disclosed or suggested in Chun et al. Therefore, claim 1 is patentable and should be allowed.

Knapp et al. regards an optical waveguide including a top and bottom cladding layer defining a tapered optical channel, extending all along the optical waveguide. Knapp et al. does not disclose or suggest that the end section of the optical waveguide is provided with an end lens. The features of claim 1 are not disclosed or suggested in Knapp et al. Therefore, claim 1 is patentable and should be allowed.

For all of the foregoing reasons, it is respectfully submitted that all of the claims now present in the application are clearly novel and patentable over the prior art of record. Accordingly, favorable reconsideration and allowance is respectfully requested. Should any unresolved issue remain, the examiner is invited to call applicant's attorney at the telephone number indicated below.

Appl. No.: 10/505,302  
Reply to Office Action of: 02/07/2006

Respectfully submitted,

Mark F. Harrington 5/5/06  
Mark F. Harrington (Reg. No. 31,686) Date

**Customer No.: 29683**  
Harrington & Smith, LLP  
4 Research Drive  
Shelton, CT 06484-6212  
203-925-9400

CERTIFICATION OF FACSIMILE TRANSMISSION

I hereby certify that this correspondence is being facsimile transmitted to the U.S. Patent and Trademark Office on the date shown below.

5/5/2006  
Date

Elaine F. Mian  
Name of Person Making Deposit